



## EASY PACK TRACK AND CLIP GARMENT BAG

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention:

1 The present invention relates to the field of travel luggage,  
2 and more specifically concerns a garment bag that when hung in a  
3 closet on a closet bar in which the clothes to be packed are also  
4 hung, the clothes can be slid along the bar without being removed  
5 therefrom into their packed position in the garment bag. It also  
6 includes a track and clip feature to hold clothing in position  
7 within the garment bag to minimize wrinkling when the garment bag  
8 is closed, removed from the closet bar and carried by the user.

#### 9' 2. Description of the prior art:

10 A common piece of luggage that is used by present day  
11 travelers is frequently referred as a garment bag. Garment bags  
12 are frequently employed by airline passengers who do not wish to  
13 check their luggage, instead preferring to carry their bags on  
14 board airplanes. A typical garment bag is sized a little larger  
15 than a blazer or sports coat when it is open to be packed and after  
16 packing it can be folded in half so as to allow the user to carry  
17 the bag at their side, as well as allow the bag to readily fit  
18 within the overhead bins in jet airliners.

19 A typical prior art garment bag is usually packed by opening  
20 it up and lying it on a bed so that clothes on hangers can be  
21 removed from a closet, laid in the garment bag and the hooks on the  
22 hangers placed around a device at the top of the garment bag that  
23 substitutes for the bar in the closet from which the clothes were  
24 removed. After the clothes are loaded into the garment bag,

1 garment bag is closed, usually with a zippered closure, and  
2 frequently then folded in half with the bottom half and top half  
3 attached to each other to produce a resulting piece of luggage that  
4 can be carried at one's side, as well as fit into the overhead bins  
5 in an airplane. There are several consequences that usually result  
6 from the foregoing procedure.

7 First of all it is necessary to remove each garment from the  
8 closet, carry it to the garment bag on the bed, lay it flat  
9 attaching the hook of the hanger to a device within the garment bag  
10 that emulates the closet bar, and smooth the wrinkles from the  
11 garment before laying the next garment on top of the first one.  
12 The second consequence is that when the garment bag is closed and  
13 folded for travel, the clothing in the bag tends to shift because  
14 of gravity and movement and tends to wrinkle. Because there is no  
15 means in prior art garment bags that effectively prevents this  
16 phenomenon, it is normal to expect the clothing placed in such a  
17 garment bag to wrinkle to some degree depending upon the length of  
18 time the garments are in the garment bag, the amount of room in the  
19 garment bag that allows shifting of the garments and the amount of  
20 movement to which the garment bag is exposed.

21 The present invention facilitates packing the garment bag  
22 while it remains hanging from a closet bar, and doing so without  
23 removing the clothing from the closet bar except for the purpose of  
24 selecting the garments to be packed and the order in which they are  
25 packed. The present invention also includes a track and clip  
26 mechanism which is intended to maintain the positioning of the

1 garments within the bag by positive control without regard to the  
2 amount of space left in the garment bag when packing is complete,  
3 the folding of the bag, and the movement to which it is subjected  
4 after the garment bag is closed and carried on the journey. Thus  
5 the present invention addresses two deficiencies of the prior art,  
6 the efforts involved in packing to minimize wrinkling of the  
7 garments, and the retention of the garments in a positive manner to  
8 minimize wrinkling after the garment bag is closed.

9 A pre-examination search commissioned by the applicant has  
10 revealed no reference that shows a means to pack a garment bag that  
11 is suspended from a closet bar wherein the garments to be packed  
12 can be slid along the same closet bar as the garment bag is  
13 suspended from in the closet without removing the garments from the  
14 closet bar during the packing process. This has the obvious  
15 advantage that the garments when placed in the garment bag remain  
16 suspended in a relatively wrinkle free posture while hanging from  
17 from the same hanger as they were in the closet before being  
18 packed. Examples of the prior art include Riccoboni, U.S. Patent  
19 No. 5,622,255, which provides separate folding hangers that are a  
20 part of the invention as illustrated in figures 6 and 6A. The  
21 garments must be moved to these folding hangers in the packing  
22 process. Other references include Myers, U.S. Patent No.  
23 5,505,297, which includes a pair of hanger support assemblies 100  
24 as shown in figure 3; Plath, U.S. Patent No. 5,732,817, which  
25 teaches ring 32 for holding conventional hangers as best seen in  
26 figure 4; Sheiman, U.S. Patent No. 4,782,947, which teaches a track

1 extension 64 for holding garment hangers 92 as seen in figure 2,  
2 and alternatively, support rails 238 and 240 for supporting  
3 conventional hanger hooks 237 as seen in figure 8; King, et al.,  
4 U.S. Patent No. 4,738,360, teaching trollies 76 as seen in figure  
5 5 supporting hangers 72 as seen figure 3; Zezza, U.S. Patent No.  
6 4,727,987, disclosing coupler 24 to support the hook of hanger 14  
7 as seen in figure 1; Ingram, U.S. No. 5,419,432, teaching a support  
8 means in figure 3 that is unnamed and unnumbered; Lynn, U.S. Patent  
9 No. 5,819,890, teaching a fixture 70 as seen in figure 5; Jackson,  
10 U.S. Patent No. 5,628,398, which teaches an unconventional hanger  
11 in figures 4 and 9, and Wasserman, U.S. Patent No. 4,126,252, which  
12 teaches an unconventional frame 10 as seen in figures 1 and 3.

13       Regarding the track and clip feature of the present invention  
14 no reference teaches this being done in a lateral manner with  
15 tracks that are horizontal. The invention stabilizes garments  
16 laterally and maintain them in a minimal wrinkle mode perpendicular  
17 to the force of gravity when the garment bag is hung up. The  
18 closest reference is Ingram, U.S. Patent No. 5,419,432 which  
19 teaches a hem clasp mechanism as shown in figure 5 which operates  
20 in a vertical rather than horizontal orientation and is for a  
21 different purpose. It teaches a hem clasp mechanism 80 coupled to  
22 separate side leg 46 including 4 vertical parallel ribs 82. The  
23 specifics of hand clasp 84 are shown in figure 6. This hand clasp  
24 mechanism does not and cannot perform the functions of the  
25 horizontal track and clip mechanism of the present invention.

1 SUMMARY OF THE INVENTION

2 Bearing in mind the foregoing, it is a principal object of the  
3 present invention to provide an easy pack track and clip garment  
4 bag in which garments on hangers supported by a closet bar can be  
5 slid without removal from the closet bar to be packed into a  
6 garment bag which is also supported by the same closet bar.

7 A related principal object of the present invention is to  
8 provide a garment bag which can be packed in a vertical hanging  
9 configuration with clothing supported on hangers from a closet bar  
10 while gravity maintains the garments in a minimum wrinkle mode as  
11 each is packed into the garment bag.

12 An additional object of the invention to facilitate editing of  
13 the choices of clothes to be removed if too many are initially  
14 elected to be packed, because they are hanging from the closet bar  
15 and can be easily removed without disturbing adjoining garments as  
16 would be the case if they were lying down in a prior art garment  
17 bag packed on a bed.

18 Another object of the invention is to provide a garment bag  
19 that permits packing it without the necessity to lay down garments  
20 and smooth out wrinkles in the garment bag.

21 A further object of the invention is to avoid the necessity to  
22 transport garments from a closet to a horizontal garment bag  
23 commonly laid in the prior art on the surface of a bed for packing  
24 purposes.

25 An additional object of the invention is to spare the time and  
26 reduce the effort to pack a garment bag by allowing the same to be

1 done in a vertical mode hanging in the closet from which the  
2 garments to be packed are selected.

3 A further object of the invention is to provide a horizontally  
4 oriented track and clip mechanism within a garment bag to maintain  
5 garments with minimum wrinkling in a lateral direction.

6 Another object of the invention is to provide a garment bag  
7 having a series of horizontal tracks in which are disposed a  
8 plurality of clips movable in said tracks horizontally to maintain  
9 at a multiplicity of positions along the side of each garment  
10 sufficient lateral stabilization to minimize wrinkling of the  
11 garments.

12 One more object of the invention is to provide a garment bag  
13 with a spine comprised of a series of ribs that have a limited  
14 pivoting connection between them that prevents folding the garment  
15 bag in a crease that would wrinkle garments packed therein.

16 Other objects and advantages will become apparent to those  
17 skilled in the art upon referenced to the following descriptions  
18 and the appended drawings.

19 In accordance with a principal aspect of the invention there  
20 is provided an easy pack track and clip garment bag which includes  
21 a cantilevered support arm having an opening that can be slid onto  
22 a closet bar to the lateral centerline of the garment bag. The  
23 invention also includes an external covering supported by  
24 cantilevered support arm to contain garments supported on  
25 conventional hangers which can be slid on the closet bar without  
26 being removed therefrom into the garment bag adjacent to the

1 cantilevered support arm. Each hanger supporting a garment is slid  
2 over a retaining strap attached to the garment bag so that when all  
3 the garments desired to be packed are in the garment bag, the  
4 retainer strap can be pulled tightly around the hanger hooks and  
5 attached through the velcro fastener to the garment bag. All of  
6 the hanger hooks are raised slightly together to permit removal of  
7 the garment bag cantilevered support arm from the closet bar after  
8 the garment bag is closed.

9 In accordance with another aspect of the present invention  
10 there is included at least one spine as a part of the garment bag.  
11 The spine is comprised of a series of ribs, alternate ribs of which  
12 contains tracks and clips along the longitudinal centerline of  
13 every other rib. Tracks allow for lateral (horizontal) movement of  
14 the clips along the ribs. This permits the clips to be positioned  
15 for attachment to the lateral edges of garments to maintain their  
16 lateral positioning, thereby minimizing wrinkling when the garment  
17 bag is closed and moved about in travel. The clips slide within  
18 the tracks, can be rotated to accommodate differing shapes of  
19 garments, have jaws with internal surfaces that protect garments  
20 from damage, and are resiliently biased into a normally closed  
21 position that can be opened by thumb pressure on the upper surface.

22 By selecting garments according to size with the smallest size  
23 being first, a plurality of garments can be clipped at their  
24 lateral edges using a single spine. The invention further  
25 contemplates the use of more than one such spine when needed for  
26 the number of garments to be packed. The first spine forms the

1 back of the garment bag, while one or more additional spines,  
2 referred to as inset spines, are disposed inside the garment bag  
3 when it is closed and folded.

#### 4 BRIEF DESCRIPTION OF THE DRAWINGS

5 Various other features and details of the present invention  
6 will become apparent to those skilled in the art from the following  
7 discussion taken in conjunction with the following drawings, in  
8 which:

9 Figure 1 is a perspective view of the easy pack track and clip  
10 garment bag in closed position but unfolded showing the  
11 cantilevered support arm, carrying handle, and retaining strap.

12 Figure 2 shows the interior elements on the back of the  
13 garment bag, with the cover removed therefrom. Seen is the spine  
14 supported by the cantilevered support arm with attached retaining  
15 strap and carrying handle in which every other rib of the spine  
16 contains along its longitudinal axis centerline two tracks and two  
17 clips.

18 Figure 3 shows a side view of the spine folded as it would be  
19 when disposed within the garment bag after the same had been folded  
20 for transport. See also figure 16.

21 Figure 4 is an enlarged view of a track and clip.

22 Figure 5 is an enlarged view of a track and clip attached to  
23 the lateral edge of a garment.

24 Figure 6 shows the spine at the back of the inventive garment  
25 bag while the garment bag is opened.



1           Figure 7 shows application of clips to the lateral edges of  
2 the top and bottom of a pair of trousers placed into the open  
3 garment bag of figure 6.

4           Figure 8 shows the placement of a suit jacket over the  
5 trousers shown on figure 7 and the attachment of a plurality of  
6 lateral clips to various points on the jacket to maintain its  
7 position laterally regardless of the orientation in which the  
8 garment bag is carried or removed after it is closed.

9           Figure 9 shows the inventive garment bag suspended on a closet  
10 bar and illustrates the movement by sliding motion of garments into  
11 the garment bag for packing purposes.

12           Figure 10 is an enlarged closeup showing the placement of the  
13 hangers adjacent to the cantilevered support arm over the retaining  
14 strap which is open for that purpose.

15           Figure 11 is also an enlarged closeup which shows the  
16 retaining strap fastened using its hook and loop fastener to retain  
17 the hangers in close proximity to each other and to the  
18 cantilevered support arm of the garment bag.

19           Figure 12 is a third enlarged close up and is the same as  
20 figure 11 except that the garment bag is closed and the hangers can  
21 be seen only through a hanger aperture.

22           Figure 13 shows the garment bag opened and packed, suspended  
23 from a closet bar, and with a second spine on the closet bar for  
24 lateral retention of additional clothing to be disposed within the  
25 garment bag. The second spine is referred to as an inset spine.

1           Figure 14 is an elevation view of the back of the garment bag  
2 showing the top plate, cantilevered support arm, slot and a  
3 multiplicity of ribs depending downwardly from the top plate. It  
4 also shows an identification plate fixedly attached within a  
5 protective ridge by fasteners.

6           Figure 14A is an enlarged inset view showing the  
7 identification plate within the protective surrounding ridge and  
8 with removable fasteners.

9           Figure 15 is side view of an empty closed garment bag showing  
10 a second handle on the bottom.

11           Figure 16 illustrates the garment bag when it has been folded  
12 for transportation in the manner illustrated by figure 3 and  
13 showing the two handles in proximity to each other.

#### 14 15           DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

16           As required, detailed embodiments of the present invention are  
17 disclosed herein; however, it is to be understood that disclosed  
18 embodiments are merely exemplary of the invention which may be  
19 embodied in various forms. Therefore, specifics structural and  
20 functional details disclosed herein are not to be interpreted as  
21 limiting, but merely as a basis for the claims and as a  
22 representative basis for teaching one skilled in the art to  
23 variously employ the present invention in virtually any  
24 appropriately detailed structure.

1           Reference is now made to the drawings, wherein like  
2 characteristics and features of the present invention shown in the  
3 various figures are designated by the same referenced numerals.

4           Figure 1 is a front, top perspective view of the easy pack  
5 track and clip garment bag 10 showing front cover 12, side cover  
6 14, top cover 16, hanger aperture 18, retaining strap 20, top  
7 handle 22, top plate 24, and cantilevered support arm 26.

8           Figure 2 is a front top perspective view of the spine 28 of  
9 garment bag 10 with the front, sides, top and bottom covers  
10 removed. The spine 28 is comprised of top plate 24 and a plurality  
11 of ribs 30 suspended there beneath. The ribs have limited pivoting  
12 connection between them to avoid a crease fold in the garment bag  
13 to minimize wrinkles that result from a crease. Alternate ribs 30  
14 contain track 32 and clip 34 assemblies in opposed pairs on each  
15 end of the relevant ribs 30. Figure 3 is an end view of the spine  
16 28 showing the geometry of the spine 28 as folded for  
17 transportation as a garment bag. See figure 16. Individual rib 30  
18 and clips 34 can be seen. So can retaining strap 20 and top handle  
19 22.

20           Figure 4 is an enlarged perspective fragmentary view of a  
21 portion of a rib 30 in which is disposed track 32 and clip 34.  
22 Clip 34 includes a base 36. Base 36 supports a post 38 having a  
23 pivot point that interacts with pivoting arm 40 . Pivoting arm 40  
24 is, in turn, attached to resiliently biased upper jaw plate 42 with  
25 thumb friction surface 44 and upper jaw 46. Base 36 also supports  
26 lower jaw 48. Upper jaw 46 and lower jaw 48 are made from fabric

1 sensitive materials to avoid damaging the fabric of garments to be  
2 clipped therein. Clip 34 is resiliently biased by conventional  
3 means (not shown) in a normally closed position and its opened by  
4 pressure applied by a user's thumb on thumb friction surface 44 to  
5 open the gap between upper jaw 46 and lower jaw 48.

6 Figure 5 shows clip 34 and its features generally, with a  
7 garment 50 firmly gripped within clip 34.

8 Figure 6 shows the garment bag of figure 1 fully opened at  
9 hinge 52. The descriptions of relevant parts in figure 1 and  
10 figure 2 apply equally to figure 6 and need not be repeated at this  
11 point.

12 Figure 7 is a front elevation view that is partially broken  
13 of what is shown in figure 6 to which has been added a pair of  
14 trousers 52. Trousers are hung on the tube 54 of a conventional  
15 wire hanger 56 the hook which 58 is held within close retainer  
16 strap 20. It will be seen in figure 7 that the side edges of both  
17 ends of trouser 52 are laterally stabilized by clips 34 which are  
18 positioned in tracks 32 to accommodate the width of the garment.

19 Figure 8 shows a jacket 60 which overlays the trousers 52 of  
20 figure 7. Note that the lateral edges and bottom of jacket 60  
21 laterally restrained four places on each sleeve and two places at  
22 the bottom by clip 34. Note that the clips can be rotated to  
23 accommodate the shapes of various garments and that there can be  
24 multiple clips in a given track to accommodate multiple garments  
25 overlying each other.

1           Figure 9 is a broken perspective view of the easy pack track  
2 and clip garment bag 10 suspended from a closet bar 62 by insertion  
3 of closet bar 62 into slot 64 disposed beneath cantilevered support  
4 arm 26. Figure 9 is intended to show how the easy pack feature  
5 works, with the garment bag 10 supported on closet bar 62 such that  
6 jacket 60 and trousers 52 can be simply slid along closet bar 62  
7 into garment bag 10, each being clipped by the track and clip means  
8 as shown in figure 7 and 8 before the following garments are placed  
9 in the garment bag. As not shown in figure 9, it is preferable  
10 that smaller garments be placed in the garment bag first so that  
11 larger ones can overlies them as illustrated in figures 7 and 8.

12           Figure 10 is an enlarged perspective fragmentary view showing  
13 how the easy pack feature partially illustrated in figure 9 works  
14 with retaining strap 20. The hooks 58 of hangers 56 are placed on  
15 the top of the retaining strap 20 as they are disposed within  
16 garment bag 10, still being supported on closet bar 62.

17           Retaining strap 20 preferably includes a magnetic strip sewn  
18 into it so that if the closet bar is a ferrous material, the  
19 retaining strap will be attracted to it and will lie flat when  
20 packing is proceeding.

21           Figure 11 shows the closure of retaining strap 20 around all  
22 the hooks 58 of hangers 56. When it is desired to remove garment  
23 bag 10 from closet bar 62, the packer merely grasps all the hangers  
24 56 and lifts them within the loop or closed retaining strap 20 as  
25 at 66 so that top plate 24 and cantilevered support arm 26 can be

1 withdrawn from closet bar 62 through slot 64 without the ends of  
2 hooks 58 interfering therewith.

3 In the closeup of figure 12, hangers 56 are visible through  
4 hanger aperture 18 in top cover 16. Hanger hooks 58 are shown  
5 around closet bar 62 adjacent to slot 64 and within retaining strap  
6 20.

7 Figure 13 illustrates that more than one spine may be employed  
8 to laterally stabilize more clothes than can be stabilized using a  
9 single spine. The first spine 28 constitutes the back of the  
10 garment bag. Any additional spines are disposed inside of the  
11 garment bag. These additional spines, termed spine insets 68, can  
12 be similarly supported on closet bar 62 and slid thereon into  
13 garment bag 10. Note, however, that top plate 70 uses a cut back  
14 channel element 72 so that it can penetrate hanger aperture 18 when  
15 the garment bag is closed.

16 Figure 14 is an elevational back view of the garment bag back  
17 28 with a multiplicity of ribs 30 and top plate 24. Also seen in  
18 figure 14 is a fixedly positioned, but removable, name, address  
19 and telephone number identification plate 74 which is preferably  
20 permanently embossed.

21 Inset figure 14A shows a closeup of the identification plate  
22 74 surrounding by a protective ridge 76 and which can only be  
23 remove using fasteners 78.

24 Figure 15 is a side elevation view of the garment bag showing  
25 back 28, front 12, side 14, retaining strap 20, top handle 22, and  
26 bottom handle 80.

1           Figure 16 shows the complete garment bag 10 folded for travel  
2   in the manner of figure 3 with handles 22 and 80 adjacent each  
3   other, sides 14, top plate 24, ribs 30, and the like.

4           While the invention has been described, disclosed, illustrated  
5   and shown in various terms or certain embodiments of modifications  
6   which has assumed in practice, the scope of the invention is not  
7   intended to be, nor should it be deemed to be, limited thereby and  
8   such other modifications or embodiments as may be suggested by the  
9   teachings herein are particularly reserved especially as they fall  
10   within the breadth and scope of the claims here appended.